

# Alaska Statewide COVID-19 Vaccine Survey, June-July 2021

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## **Background**

In March 2021, Alaska became the first state to remove eligibility requirements for the COVID-19 vaccine for individuals aged ≥16 years. Just over 10 months later, as of January 19, 2022, 75.9% of Alaskans aged ≥18 years have received at least one dose of the vaccine, and 68.3% have completed the primary series.¹ Although vaccination reduces the risk of transmission, hospitalization and death from COVID-19, misinformation about the safety and efficacy of vaccination continues to circulate, and the delta and omicron variants have caused a surge in COVID-19 cases in Alaska.² Continued efforts are needed regarding COVID-19 vaccination and to promote public health. The Alaska Department of Health and Social Services (DHSS) and partners have carried out many initiatives, including materials to empower clinicians and the public to understand the benefits and risks of vaccination; weekly "ECHO" talks for several audiences; the Sleeves Up for Summer campaign, during which over 100,000 Alaskans were vaccinated; and the Alaska Chamber's Give AK a Shot sweepstakes.³,4 To better support these efforts, it is important to understand the factors influencing Alaskans' decisions regarding COVID-19 vaccination.

#### Methods

DHSS contracted Alaska Survey Research to conduct an online survey in June–July 2021 to understand Alaskans' attitudes towards COVID-19 vaccines and the media sources people use and trust for vaccine information. A similar survey in March 2021 informed the instrument for the second survey (e.g., we included sections on conversations with health care providers and with friends and family, since the first survey indicated that those groups were trusted messengers).<sup>5</sup> The first survey was a single sample of vaccinated and unvaccinated Alaskans (n=1,256). The target for the second survey was for ≥75% of the total sample to be unvaccinated, so vaccinated and unvaccinated respondents were sampled separately. As in the first survey, the total desired sample was 1,000 respondents statewide, plus an oversample of 250 from the Matanuska-Susitna Borough (funded by the Mat-Su Health Foundation).

Beginning on June 12, 2021, a survey URL was sent by text message to a randomly generated list of Alaska phone numbers (i.e., 907 area code). Participants were eligible if they were aged ≥18 years and had an Alaska zip code. As most respondents were vaccinated, it became clear that this random-digit texting method would not be feasible to obtain our desired sample of unvaccinated respondents. To recruit the remaining respondents, Alaska Survey Research used a panel of unvaccinated people who had just completed an unrelated DHSS survey and had indicated they would be willing to be contacted for additional surveys. The vaccine survey closed on July 20, 2021.

Most survey questions were asked of unvaccinated respondents only. For most of this report, we focus on the subsample of unvaccinated respondents who are "less hesitant", which we defined as those who said they are definitely or probably going to get a vaccine, are unsure, or are probably not going to get vaccinated (n=501). The remaining "more hesitant" respondents stated that they are definitely not going to get vaccinated (n=406).

Results were weighted to reflect the Alaska population by vaccination status, age, geographic region, gender, marital status, race, and education level. All weighted percentages have  $\pm 5\%$  error. Note that all the percentages reported in the Results section below are weighted, unless otherwise specified.

#### Results

## Sample Characteristics

Of the 1,134 Alaskans who completed the survey, 907 (80%) were unvaccinated and 227 (20%) were vaccinated, exceeding the target to have ≥75% of the sample unvaccinated. Approximately 32% were from the Municipality of Anchorage, 32% from the Mat-Su Borough (due to the planned oversample), 16% from the Interior, 11% from the Gulf Coast, 6% from Southeast, 2% from Southwest, and 2% from the Northern region. Of the total respondents, 60% were female, 51% were married, 52% were aged <45 years, 68% had a college degree, 57% had an annual household income below \$80,000, 56% lived in a household with three or more people, and 70% were non-Hispanic Whites. Table 1 lists the respondent characteristics for the two separate samples and the subsample of less hesitant respondents, who were the focus of this report.

Table 1. Demographic Characteristics of Survey Respondents — Alaska Statewide COVID-19 Vaccine Survey, June-July 2021

	Unweighted % *		
Demographics	Vaccinated sample (n=227)	Unvaccinated sample (n=907)	Less hesitant subsample (of unvaccinated; n=501)
Gender Identity (n=221) (n=901) (of univaccinated; n=501)			
Male	45.5	39.2	36.0
Female	52.7	57.9	61.1
Other / Transgender / Non- conforming	1.8	2.9	2.8
Education			
No College Degree	46.6	73.0	75.7
College Degree	53.4	27.0	24.3
Race/Ethnicity			
Non-Hispanic Whites	80.2	67.2	65.2
Racial/Ethnic Minorities	19.8	32.8	34.8
Age			
Below 45 years	28.7	57.7	64.6
45 years and above	71.3	42.3	35.4
Marital Status			
Not Married	38.1	52.2	55.9
Married	61.9	47.8	44.1
Annual Household Income			
Less than \$80,000	46.3	59.1	64.4
\$80,000 and above	53.7	40.9	35.6
Number of Household Members			
Under 3	56.8	40.8	39.0
3 or more	43.1	59.2	61.0
Children in the Household			
No children under 18	74.0	56.7	54.7
1 or more children under 18	26.0	43.3	45.3

<sup>\*</sup>This table provides an overview of selected demographic characteristics of respondents to indicate their representativeness of the Alaska population. For this reason, unweighted percentages are used, which should not be used to make inferences about Alaskans in general.

## Vaccine Hesitancy and COVID-19 Attitudes

Among unvaccinated people, 42% definitely did not plan to get vaccinated (more hesitant), while 58% either planned to get vaccinated, were unsure, or probably did not plan to (less hesitant).

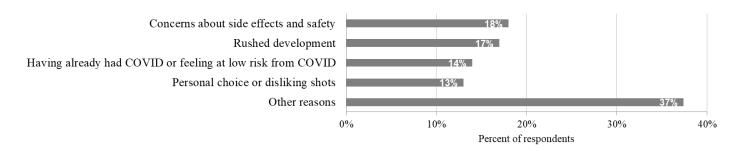
Among more hesitant people, four in five consider themselves at no or low risk of severe COVID-19 illness due to age or medical condition, and no or low risk of COVID-19 exposure based on where they work or live (85% and 84%, respectively). In contrast, 66% of less hesitant people considered themselves to be at no or low risk of severe COVID-19 illness based on age or medical conditions. Based on where they work or live, 77% considered themselves at no or low risk of exposure to COVID.

Almost three quarters (74%) of less hesitant people were open to learning more about COVID-19 vaccines (i.e., stated that they were very, somewhat or not very interested in learning more, or not sure). However, only 27% of more hesitant people were open to learning more.

#### Self-Reported Reasons for Planning Not to Get Vaccinated

The four main reasons for less hesitant respondents not getting vaccinated were concerns about side effects and safety (18%), rushed development or lack of FDA approval (17%), feeling at low risk or already having had COVID (14%) and personal choice or disliking shots (13%) (Figure 1). All other reasons were given by fewer than 10% of less hesitant respondents.

Figure 1. Main Reasons for Not Getting Vaccinated Given by Alaskans Who Reported Being Less Vaccine Hesitant (n=353) — Alaska Statewide COVID-19 Vaccine Survey, June–July 2021



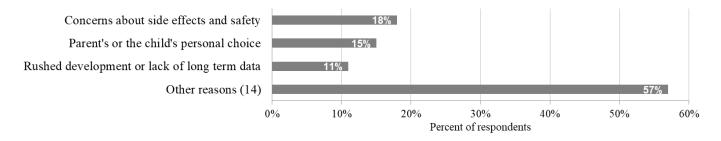
We further analyzed two subgroups of less hesitant respondents: those who said they did plan to get vaccinated (who were asked why they had not gotten vaccinated yet) and those who said they probably did not plan to or were unsure (who were asked why they would not plan to). The most common reasons given by the latter group were the same as those stated in Figure 1. In contrast, the main reason that respondents who planned to get vaccinated had not done so yet was that they had time or accessibility constraints or not enough information (31%).

## Respondents with Children: Hesitancy and Reasons to Not Get Vaccinated

Of all respondents who had children aged 12–18 years (n=251), 20% had already vaccinated their eligible children. For respondents who were themselves vaccinated, 41% had already vaccinated all their eligible children (the sample size for this result was small: n=38). In contrast, 3% of unvaccinated respondents had vaccinated all their eligible children.

Of the respondents who had not vaccinated all their eligible children, 65% were less hesitant about doing so (had already vaccinated some of them, planned to, were unsure, or probably did not plan to); the remaining 35% stated that they definitely did not plan to get their children vaccinated. The main reasons for not getting children vaccinated were concerns about side effects and safety (18%), that it was the parent's or the child's personal choice (15%), and that vaccine development was rushed and did not include long-term data (11%) (Figure 2).

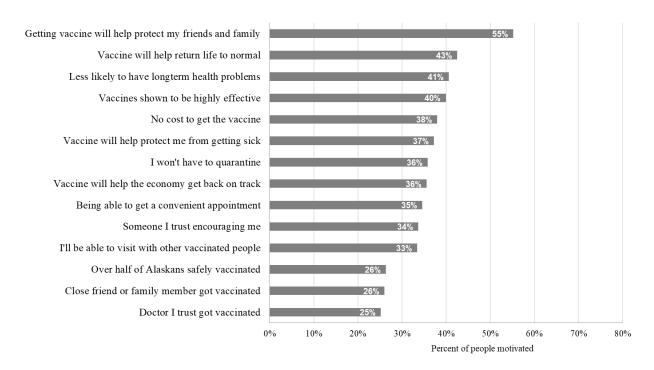
Figure 2. Main Reasons Given by Alaskans (n=171) for Not Getting Children Aged 12–17 Years Vaccinated — Alaska Statewide COVID-19 Vaccine Survey, June–July 2021



Motivations, Attitudes and Beliefs toward COVID-19 Vaccines

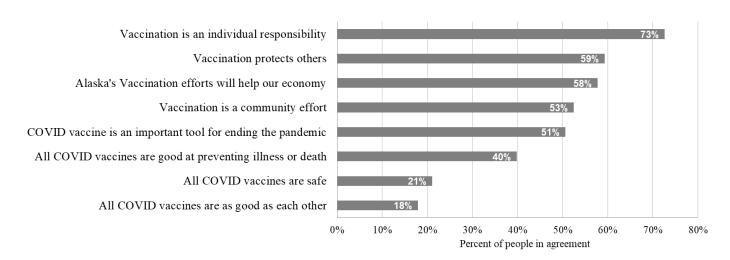
Unvaccinated respondents were given a list of 14 factors that may motivate them to get vaccinated. We calculated the percentages of less hesitant people who rated each factor as a big or moderate motivator (Figure 3). More than half (55%) stated they were motivated by protecting friends and family; the other factors were motivating for 25% to 43% of people.

Figure 3. Motivating Factors for Alaskans Who Reported Being Less Vaccine Hesitant (n=501) — Alaska Statewide COVID-19 Vaccine Survey, June–July 2021



We assessed unvaccinated respondents' attitudes and beliefs by asking their agreement or disagreement with eight statements. We calculated the percentage of less hesitant people who strongly or mildly agreed with each (Figure 4). Almost three quarters (73%) agreed that vaccination is an individual responsibility. Over half agreed that "vaccination protects others" (59%), "Alaska's vaccination efforts will help our economy" (58%), "vaccination is a community effort" (53%), and "the vaccine is an important tool for ending the pandemic" (51%). From 18% to 40% of less hesitant Alaskans agreed with the remaining statements.

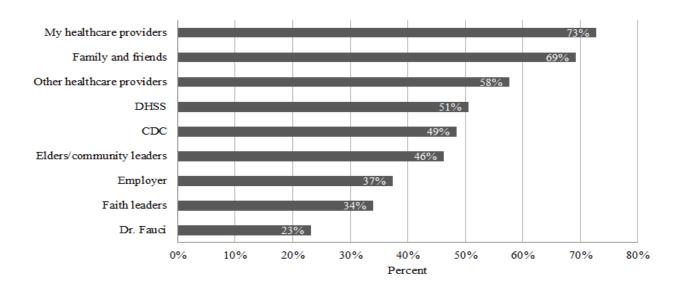
Figure 4. Agreement with Statements About the Vaccine by Alaskans Who Reported Being Less Vaccine Hesitant (n=501) — Alaska Statewide COVID-19 Vaccine Survey, June–July 2021



## Trusted Sources and Desired Types of Information

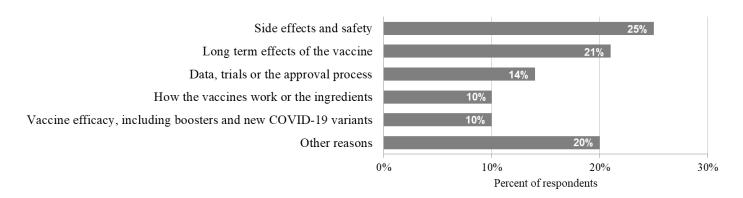
We asked unvaccinated respondents how much they trust 11 sources of information about COVID-19 vaccines and assessed the percentage of less hesitant people who stated that they trust each source totally or moderately (Figure 5). Most (73%) stated that they trusted their health care provider, 69% stated they trusted family and friends, and 58% stated they trusted other health care providers. The remaining sources of information were trusted by 23% to 51% of people.

Figure 5. Sources of Information Most Trusted by Alaskans Who Reported Being Less Vaccine Hesitant (n=501) — Alaska Statewide COVID-19 Vaccine Survey, June–July 2021



Respondents who said they were very or somewhat interested in learning more about COVID-19 vaccines also stated what information they would be interested in learning about. One quarter of these Alaskans wanted to learn more about side effects and safety; 21% about the long-term effects of the vaccine; 14% about data, clinical trials, or the approval process; 10% about how the vaccines work or what the ingredients are; and 10% about vaccine efficacy, including the need for boosters and the implications of new COVID-19 variants. All other response categories were given by approximately 5% or fewer people (Figure 6).

Figure 6. Vaccine Information that Alaskans Would Be Interested in Learning About (n=213) — Alaska Statewide COVID-19 Vaccine Survey, June–July 2021



Conversations with Health Care Providers

Of unvaccinated respondents who had seen a health care provider in the past 3 months (n=539), 67% had seen a primary care provider, 13% had seen a dentist or eye doctor, 11% had seen a specialist, 8% had seen a complementary/alternative medicine provider, and 7% had seen a nurse. Other types of providers were seen by fewer than 5% of people.

Approximately half (51%) of the unvaccinated respondents who had seen a health care provider had had a conversation with them about vaccination. Of those who had done so, 43% were asked if they wanted to be vaccinated during the appointment, 42% discussed their health history related to vaccination, and 41% were encouraged by their provider to get vaccinated. Other conversation topics were each discussed by 20% to 30% of people: the provider's own decision to get vaccinated, possible side effects, or how the vaccines were developed.

#### Vaccinated Respondents: Conversations with Unvaccinated Friends and Family

Most vaccinated people (79%) had spoken with unvaccinated friends, family, or acquaintances about getting a COVID-19 vaccine. Of those who had not, for 75% this was because most people they knew were vaccinated already, for 25% it was a private decision, and only 2% thought it might lead to disagreement (but note that the sample size for this result is small: n=40). Of those who had spoken with unvaccinated friends or family, 83% shared their personal experience, 69% explained why they think vaccination is a good idea, 52% shared factual information, 34% felt that the other person became *less* open to vaccination, 33% felt that the other person became more open to vaccination, and 24% offered to help the other person get vaccinated.

# Media Usage

We asked unvaccinated respondents how frequently they use 10 types of media (for any use, not just to find out about COVID-19) and calculated the percentage of less hesitant respondents who use each type daily. Over two thirds (69%) searched the internet daily. The remaining media types were used daily by 9% to 49% of people, with many using videos on the internet (49%), FM/AM radio (49%), Facebook (48%), and streaming TV (48%).

# Discussion

While some unvaccinated Alaska adults stated they would definitely not get vaccinated against COVID-19, the majority were less hesitant. These less hesitant Alaskans were also more interested in continuing to learn about the vaccines than those who were more hesitant.

In our first vaccine hesitancy survey in March 2021, we also focused on those who would be the primary audience for such efforts to promote vaccination.<sup>5</sup> However, our categorization of the "less hesitant" group here is different than the "hesitant and open" group we focused on in the first survey, so we do not explicitly compare the two surveys in this report. The purpose of the two surveys was not to measure changes in vaccine hesitancy, but rather to gain an understanding of barriers to vaccine uptake at a given moment in time in order to inform communication efforts.

Many Alaska adults who have not been vaccinated against COVID-19 continue to have concerns regarding the safety of COVID vaccines. Some reported wanting to see more data around the long-term effects and studies, independent from government or media. Full FDA approval of the Pfizer vaccine (which occurred after this survey occurred) might have improved vaccine confidence for some Alaskans.

The findings from this report also indicate that interpersonal conversations with trusted health care providers, family, and friends, can help build vaccine confidence and increase vaccination rates. When discussing COVID-19 vaccines with unvaccinated people, it can be effective to relay personal stories and the knowledge of how the choice of whether to get vaccinated affects others around them.<sup>6</sup> This survey was fielded before the delta variant had much of an impact in Alaska, but in the following months (September–October 2021) case counts surged due to the delta variant, with Alaska's hospitals under such stress that many had to implement crisis standards of care. Increased hospitalizations and personal connections to those who have developed severe illness or died have been shown nationally to motivate vaccination.<sup>7</sup> However, people's perceptions of risk are deeply influenced by their prior beliefs.<sup>8</sup>

As of November 4, 2021, Alaskans aged 5–11 years were newly eligible for vaccination, meaning that a substantial proportion of the Alaska population has not yet been vaccinated. Pediatric COVID cases have increased, coupled with a return to school for many and more indoor activities during the cooler months. As of January 19, 2022, 45% of Alaska cases occurred in persons aged ≤29 years, with younger age groups surpassing older groups for case rates. As such, it is important to continue to promote vaccination in younger age groups.

## Recommendations

- 1. Find ways for vaccinated Alaskans to build trust and common ground with those who are not yet vaccinated.
- 2. Encourage unvaccinated people to talk to their friends and family about why they chose to get vaccinated against the SARS-CoV-2 virus, as well as their health care providers, since these groups are the most trusted messengers.
- 3. Address perceptions of risk of COVID-19 at the individual and community levels (e.g., through shared stories and perspectives about vaccine experiences, including from those who have had severe COVID illness).
- 4. Emphasize the economic impacts of COVID that may be incurred when Alaskans are unvaccinated.
- 5. Empower providers and other trusted messengers to continue to answer questions about vaccines.
- 6. Continue to proactively address common misconceptions about COVID vaccination.
- 7. Given the trust in health care providers, work with school nurses, family practitioners, and pediatricians to address parental concerns.
- 8. Recognize and continue to thank those Alaskans who have already chosen to get vaccinated; such positive feedback can be helpful to promote behavior change more broadly.<sup>8</sup>

#### References

- 1. Alaska DHSS COVID-19 Vaccine Dashboard. Retrieved January 22, 2022. https://experience.arcgis.com/experience/b2f5a105a41c4ca88024efbc2c2e868f/
- 2. New York Times COVID-19 Case Count. Retrieved September 23, 2021. https://www.nytimes.com/interactive/2021/us/covid-cases.html
- 3. DHSS Sleeves Up for Summer dashboard. Retrieved September 23, 2021. https://experience.arcgis.com/experience/3b292b127505442eb985834e9782fb33
- 4. Give AK a Shot sweepstakes. Retrieved September 23, 2021. https://www.giveakashot.com/
- 5. Alaska DHSS Section of Epidemiology Bulletin. Volume 22 Number 2. http://www.epi.alaska.gov/bulletins/docs/rr2021 02.pdf
- 6. Volkman J (2017). Narratives in Health and Risk Messaging. *Oxford Research Encyclopedia of Communication*. https://doi.org/10.1093/acrefore/9780190228613.013.306
- 7. Kaiser Family Foundation. Retrieved September 28, 2021 https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-september-2021/
- 8. Kahneman D (2011). Thinking, Fast and Slow. New York: Farrar, Straus and Giroux.
- 9. Alaska DHSS COVID-19 Cases Dashboard. Retrieved January 22, 2022. https://experience.arcgis.com/experience/af2efc8bffbf4cdc83c2d1a134354074